

For Residential and Commercial Snow Melt Applications

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

ProMelt® PM-224 Sensor/Controller

Remote Snow/Ice Sensor

The PM-224 is a 24 volt, self contained temperature, snow and ice sensing control. Each PM-224 can operate with a supply voltage in the range of 22-28VAC. The integrated snow sensor is heated to allow for snow, ice, or freezing rain to melt, allowing proper detection of environmental conditions.

Specifications

Supply Voltage	22 - 28 VAC
Power	12 VA nominal
Maximum Amperage	Determined by Contactor Panel
Supply Wire	18-24AWG, 4-conductor Shielded Cable
Trigger Temperature Range (TT)	34°F to 44°F (1.1°C to 6.5°C)
Configuration Modes	Snow Only (Recommended) Rain Only Snow or Rain
Delay Settings (post melting)	30 to 90 minutes 2 to 6 hours
Low Temperature Cutoff (LTC)	Prevents system operation when Ambient Temperature (AT) is below 15°F (9.5°C)
Operation Modes	Automatic Standby/Reset Manual

Installation Parameters

The PM-224 must be installed in a location that exposes the moisture grid to a clear view of the sky and any precipitation. **Note: The unit should not be mounted directly under eaves, overhangs, or other obstructions that can block precipitation from reaching the moisture grid.**

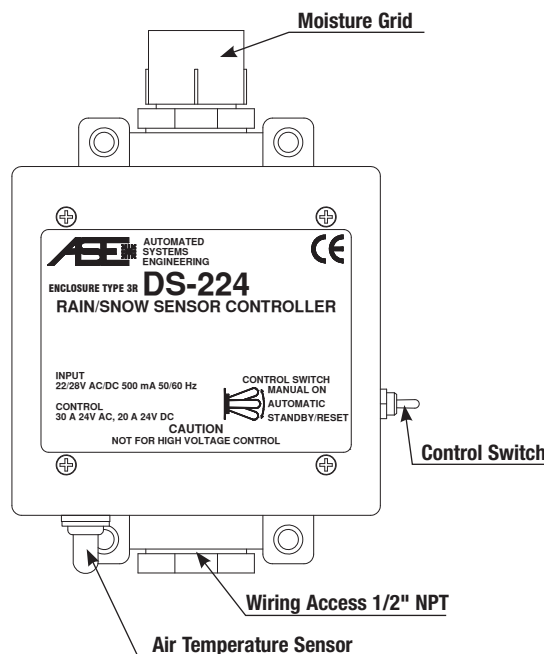
Do not install the sensor close to the ground, or any other location, that can cause the sensor to be buried in snow.

Mount the PM-224 outdoors, away from furnace vents, dryer vents, and other sources of heat. The PM-224 can be mounted to a free-standing conduit or by using the mounting holes in each corner of the enclosure. Do not drill holes in the enclosure.

⚠ CAUTION

This Engineering Sheet is not intended to provide full installation instructions and safety information. In order to avoid property damage or injury, please refer to the complete installation manual and product safety information provided with the product.

Watts Radiant product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Radiant Technical Service. Watts Radiant reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts Radiant products previously or subsequently sold.



PM-224 provides integrated air and moisture detection within a rainproof and ice-resistant enclosure.

The PM-224 control requires the use of a Contactor Pro Relay Panel to deliver power to the ProMelt system. Refer to the Contactor Pro Relay Panel installation manual for further details.

Use of a shielded, outdoor rated 18-24AWG, 4-conductor cable is required to connect the Contactor Pro Relay Panel to the sensor (The total length of shielded supply wire cable should not exceed 100 feet (30.5 m) for 22 or 24 AWG and 200 feet (60.9 m) for 18 or 20 AWG. All connections must be made in an outdoor rated, water-tight electrical enclosure.

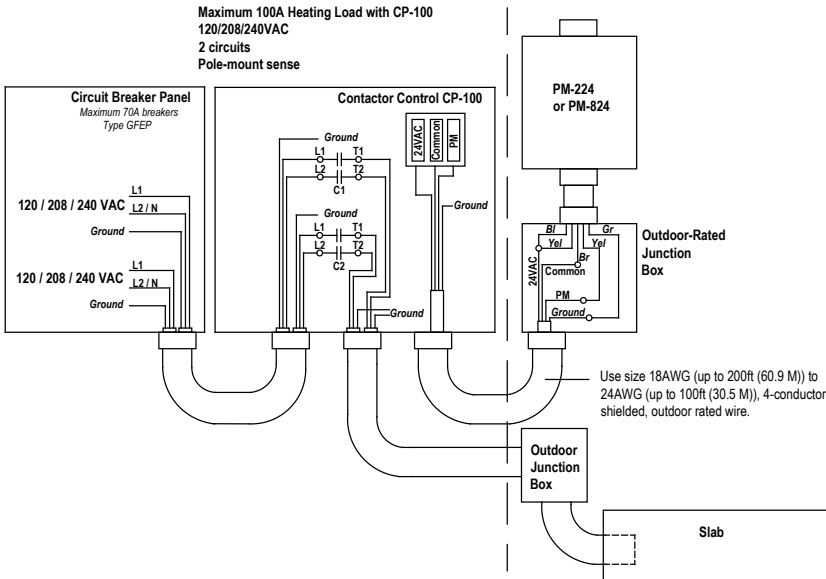
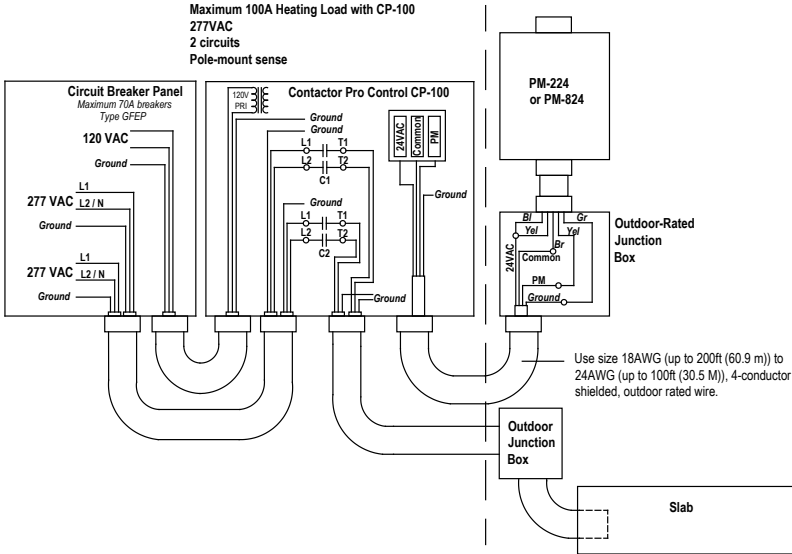
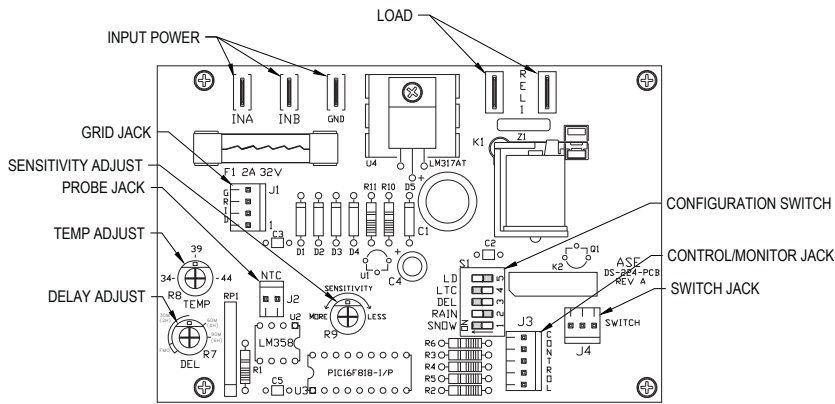
Wire the controller in accordance to the PM-224 schematics provided with the controller.

Standards and Listings



√	Description	Dimensions	Order #
	PM-224 Sensor/Control	5" x 7" x 3" (127.0 mm x 177.8 mm x 76.2 mm)	81012642

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Floor Heating & Snow Melting
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⚠ WARNING: General Safety Instructions

1. THIS UNIT SHOULD BE INSTALLED ONLY BY QUALIFIED PERSONNEL!
2. Disconnect all power from the control, or any associated equipment, before opening the front cover plate.
3. Limit input voltage to 22-28 VAC
4. To avoid fire hazard, replace fuse **only** with 2 Amp 32 V or 250 V 3AG fast acting fuse.
5. Do not drill holes through the electrical enclosure for mounting. Mount the control to a free-standing conduit or via the pre-determined mounting holes.
6. Ensure front cover gasket is properly installed when replacing cover.

Recommended Switch Settings

Function	Trigger	LD Off	LD on	LTC	DEL	RAIN	SNOW
Snow controller w/o LTC	TT>AT	30-90 min	2-6 hr	OFF	ON	OFF	ON
Snow controller w/LTC	TT>AT>15°F (9.5°C)	30-90 min	2-6 hr	ON	ON	OFF	ON

DO NOT set the Rain switch to "ON". Possible overheating of the snow melt cables may result.

Typical wiring diagrams for PM-224 Remote Snow/Ice sensor to Contactor Pro CP-100 Relay Panel.